REMARKS

Claims 8-9 and 13-26 are pending. Claims 8, 18, and 25 are independent and stand rejected under 35 U.S.C. § 103 as being unpatentable over Bader (U.S. Patent No. 6,542,934) in view of Egoshi (U.S. Patent No. 6,163,526) and in further view of Murakami (U.S. Pat. No. 5,437,059). However, the references, alone or in combination, do not teach or suggest every limitation of these claims.

The claimed invention provides a transport network element that safely and efficiently handles protection switching following the failure and recovery of a primary circuit in a network system. The network element includes an agent that controls a traffic selector to switch between a primary traffic circuit and a secondary traffic circuit, as well as the activation/deactivation of the secondary traffic circuit. Particularly, the agent exchanges signaling messages with a corresponding remote agent to communicate when the primary circuit has fully recovered and to deactivate the secondary circuit. These messages function as a signaling "handshake" to prevent the network element from prematurely switching from the secondary traffic circuit to the primary traffic circuit before the corresponding remote network element is fully recovered.

To that end, claim 8 is directed to a transport network element and recites, "an agent configured to ... send a RevertRequest message to the remote agent to request the remote agent to deactivate the previously activated secondary traffic circuit, responsive to detecting that the failure on the primary traffic circuit no longer exists." The Office Action acknowledges that neither Bader nor Egoshi teaches or suggests this limitation, but alleges that Murakami does. However, Murakami neither teaches nor suggests anything of the sort.

Murakami discloses a paging system having a central control station (30) that provides a plurality of transceiver stations (1..n) with a paging signal for transmission to a pager. Referring to Figure 4 of Murakami, the transceiver station has a first relay part (11) and a second relay

part (12). Normally, the first relay part receives the signal from the control station over lines (r, s). For redundancy purposes, the second part also receives the same signal as transmitted from the other neighboring transceiver stations, and stores the signal in memory. If the transceiver station detects that both lines (r, s) into the first part have failed (i.e., communications with the control station have been severed), a switch (45) switches the internal traffic flow of the transceiver to the second relay part (12). Upon switching, the signal received from the neighboring base stations is retrieved from memory and transmitted via an air interface to the pager. In this manner, a given transceiver station can continue to transmit a signal to a pager even when communication between the given transceiver station and the control station that provides the signal has been interrupted. *Murakami*, col. 4, ll. 7-29.

Murakami does not teach or suggest an agent that "[sends] a RevertRequest message to the remote agent to request the remote agent to deactivate the previously activated secondary traffic circuit, responsive to detecting that the failure on the primary traffic circuit no longer exists." In fact, there is no teaching or suggestion of switching between traffic circuits in response to a message exchange whatsoever in Murakami, let alone in response to a specifically named RevertRequest message, as claimed. In contrast, Murakami expressly discloses that each transceiver station monitors the lines (r, s) internally, and switches between internal components (i.e., the first and second relay parts) based on that monitoring. *Murakami*, col. 6, ll. 15-33. There is no agent in the transceiver station that determines whether the transceiver station receives traffic from a network node over a primary or secondary traffic line, as claimed. Instead, the transceiver station determines whether it receives a data signal from a control station (30), or retrieves the signal from local memory. Even where the switch of Murakami causes the transceiver station to retrieve the signal from memory, that signal is received from a completely different network element (i.e., another neighboring transceiver station) via a completely different interface (i.e., an air interface). *Murakami*, col. 6, ll. 34-46.

This does not teach or suggest the redundant communications paths between first and second network elements having corresponding agents, as claimed.

Notwithstanding the above, there is no reason for one skilled in the art to combine Bader and Murakami as asserted in the Office Action. Bader discloses returning network traffic from a secondary path back to a primary path once the primary path is recovered and available for traffic. However, Bader explicitly teaches utilizing a "phased approach" to switching that traffic. That is, Bader switches only some of the traffic back to the primary traffic path (i.e., the traffic that can be transferred immediately without being lost). The rest of the traffic (i.e., non-transferable sessions) must remain on the secondary path until their respective users terminate the sessions. *Bader*, col. 8, ll. 29-65; col. 9, ll. 21-36. Murakami, in contrast, teaches an "all or nothing" approach to reverting traffic back to the lines (r, s) leading from the control station. Specifically, when the lines (r, s) become available, Murakami terminates the power to the second relay part to deactivate that part. *Murakami*, col. 6, ll. 34-46.

Indeed, cutting the power to the second relay part in Murakami would cause that part to immediately cease operating. Therefore, modifying Bader according to the teachings of Murakami would cause the "non-transferable" calls remaining on the secondary circuit of Bader to be dropped immediately. Since Bader teaches, and fundamentally relies on, the ability of the secondary circuit to remain operating until the "non-transferable" calls terminate normally, the proffered modification would render Bader unusable for its intended purpose.

For similar reasons, one skilled in the art would never seek to combine Bader with Egoshi. Particularly, Egoshi discloses a method for handling traffic upon detecting that the primary traffic circuit has failed. Like Murakami, Egoshi teaches moving *all* traffic from a working path to a protection path at the same time, and thus, directly contradicts the phased transfer of traffic disclosed by Bader. As such, the method disclosed by Egoshi is also incompatible with the approach of Bader.

Further, the Office should note that by disclosing a method of handling a failure of a primary circuit, Egoshi teaches *pre-recovery* activity. In contrast, in disclosing a method of returning traffic to a restored primary path, Bader teaches *post-recovery* activity. Post-recovery activity and pre-recovery activity occur at two different times and are performed in response to completely different triggers. For Egoshi, that trigger is *the failure* of the primary traffic circuit. For Bader, that trigger is *the recovery* of the primary circuit. One method does not teach or suggest the other, and as such, there is no reason for anyone skilled in the art to combine these references as alleged in the Office Action.

Therefore, none of Bader, Egoshi, and Murakami, alone or in combination, teaches or suggests "an agent configured to ... send a RevertRequest message to [a] remote agent to request the remote agent to deactivate [a] previously activated secondary traffic circuit, responsive to detecting that the failure on the primary traffic circuit no longer exists." And since all of the references fail to teach or suggest the same limitation of claim 8, any combination of the references necessarily fails to teach or suggest that same limitation. Moreover, their incompatibilities necessarily means that no one of ordinary skill in the art would have any reason to combine the references. Thus, claim 8 and its dependent claims are not obvious over the cited art.

With respect to the remaining independent claims, claim 18 is directed to a method of operating a transport network element to activate and deactivate a pre-programmed secondary traffic path in a transmission network. Claim 25 is directed to a corresponding network system having a transport network element. Both claims 18 and 25 recite language similar to that of claim 8, and as such, are not obvious over the cited art for reasons similar to those stated above.

As for the dependent claims, they include all limitations of their respective parent claim(s), and as such, are non-obvious over the art of record. Accordingly, all pending claims

are now in condition for allowance, and Applicant respectfully requests a Notice of Allowance for all pending claims.

Respectfully submitted,

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Dated: October 28, 2011

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